

What is claimed is:

1. A power supply wire comprising:

a core wire comprising stranded wires made of copper alloy having high strength and high conductivity;

5 an insulating layer covering said core wire; and

an outer layer, comprising stranded wires made of nonmagnetic metal, covering said insulating layer.

2. A power supply wire comprising:

10 a core wire comprising stranded wires made of copper alloy having high strength and high conductivity;

an insulating layer covering said core wire;

an outer layer, comprising stranded wires made of copper alloy having high strength and high conductivity,
15 covering said insulating layer; and

an outermost insulating layer covering said outer layer.

3. A wire grip comprising:

20 an inner sleeve having a wire-insertion bore for inserting a wire, a plurality of ball-set bores opened at both of said wire-insertion bore and an outer surface of said inner sleeve and a tapered outer surface which is formed at a portion where said ball-set bores are
25 formed;

a plurality of balls received in said ball-set bores and protruding partially into said wire-insertion

bore so as to be pressed to said wire;

an outer sleeve having a tapered inner surface which is contacted with said tapered outer surface of said inner sleeve so as to press said balls inwardly;

5 and

a spring for biasing said inner sleeve with respect to said outer sleeve in a direction in which the tapered outer surface is tapered down,

wherein said ball-set bores are arranged at spaced-
10 apart plural positions in an axis direction of said wire-insertion bore, and,

said balls (a large-diameter ball and a small-diameter ball) received in said plural positions of ball-set bores have a diameter which varies according to
15 positions of said ball-set bores.

4. A wire grip according to claim 3, wherein each of said ball-set bores has a retainer portion for preventing excessive protrusion of said ball at the end
20 thereof opened to said wire-insertion bore.

5. A wire grip according to claim 3 or claim 4, wherein three large-diameter ball-set bores and three small-diameter ball-set bores are alternatively arranged at a
25 same central angle around the axis of said inner sleeve.

6. An electrical apparatus suspension unit comprising:

a plurality of power supply wires comprising a core wire comprising stranded wires made of copper alloy having high strength and high conductivity, an insulating layer covering said core wire and an outer
5 layer comprising stranded wires made of nonmagnetic metal, covering said insulating layer;

a lower holder for gripping a lower end portion of each of said power supply wires and being coupled to each of hung members of an electrical apparatus; and

10 an upper holder for gripping an upper end portion of each of said power supply wires.

7. An electrical apparatus suspension unit according to claim 6, wherein at least two of a plurality of said
15 power supply wires are connected such that upper ends and lower ends of said core wires thereof are connected to a terminal of said electrical apparatus and a power line, respectively.

20 8. An electrical apparatus suspension unit comprising:

a power supply wires comprising a core wire comprising stranded wires made of copper alloy having high strength and high conductivity, an insulating layer covering said core wire, an outer layer comprising
25 stranded wires made of copper alloy having high strength and high conductivity, covering said insulating layer and an outermost insulating layer covering said outer

layer,

a lower holders for gripping a lower end portion of said power supply wire and being coupled to a hung member of an electrical apparatus; and

5 an upper holder for gripping an upper end portion of said power supply wire.

9. An electrical apparatus suspension unit according to claim 8, wherein said power supply wires are connected
10 such that upper ends and lower ends of said core wire and said outer layer thereof are connected to a terminal of said electrical apparatus and a power line, respectively.

15 10. A wire grip comprising:

an inner sleeve having a wire-insertion bore for inserting a wire, a plurality of ball-set bores opened at both of said wire-insertion bore and an outer surface of said inner sleeve, and a tapered outer surface which
20 is formed at a portion where said ball-set bores are formed;

a plurality of balls received in said ball-set bores and protruding partially into said wire-insertion bore so as to be pressed to said wire;

25 an outer sleeve having a tapered inner surface which is contacted with said tapered outer surface of said inner sleeve so as to press said balls inwardly;

and

a spring for biasing said inner sleeve with respect to said outer sleeve in the direction in which the tapered outer surface is tapered down,

5 wherein each of said inner sleeve and said outer sleeve has a slotted groove communicated with said wire-insertion bore, and

said wire grip further comprising a jig by which said wire is pushed into said slotted grooves.

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11. A wire grip according to claim 10, wherein said jig comprising:

a sleeve pressing portion for pressing said inner sleeve in an opposed direction to a biasing direction of
15 said spring, and

a strip portion extending from said sleeve pressing portion and for pushing said wire into said slotted grooves.

20 12. An electrical apparatus suspension method for suspending an electrical apparatus by using a power supply wire comprising a core wire comprising stranded wires made of copper alloy having high strength and high conductivity, an insulating layer covering the core wire
25 and outer layer comprising braided wires made of nonmagnetic metal and covering the insulating layer, in which the electrical apparatus is securely held to said

wire by using a wire grip, the wire grip comprising:

an inner sleeve having a wire-insertion bore for inserting said wire, a plurality of ball-set bores opened at both of said wire-insertion bore and an outer surface of said inner sleeve and a tapered outer surface which is formed at a portion where said ball-set bores are formed;

a plurality of balls received in said ball-set bores and protruding partially into said wire-insertion bore so as to be pressed to said wire;

an outer sleeve having a tapered inner surface which is contacted with said tapered outer surface of said inner sleeve so as to press said balls inwardly; and

a spring for biasing said inner sleeve with respect to said outer sleeve in a direction in which said tapered outer surface is tapered down,

said wire grip further comprising a jig for pushing said wire into slotted grooves, which are formed at said inner sleeve and said outer sleeve and communicated with said wire-insertion bore,

wherein said wire is fitted into said slotted grooves from the side surface of said wire grip and pushed into said slotted grooves by using said jig so that said wire can be held by said wire grip.

13. An electrical apparatus suspension method according

to claim 12, said method comprising:

cutting said wire at a desirable length;

sliding said outer layer from the cut end in the length direction so as to expose said insulating layer;

5 stripping said insulating layer so as to expose said core wire; and

connecting said core wire to a terminal of the electrical apparatus and pushing said slid outer layer into said slotted grooves.

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14. A wire grip comprising:

an inner sleeve having a wire-insertion bore for inserting a wire, a plurality of ball-set bores opened at both of said wire-insertion bore and an outer surface
15 of said inner sleeve and a tapered outer surface which is formed at a portion where said ball-set bores are formed;

a plurality of balls received in said ball-set bores and protruding partially into said wire-insertion
20 bore so as to be pressed to said wire;

an outer sleeve having a tapered inner surface which is contacted with said tapered outer surface of said inner sleeve so as to press said balls inwardly; and

25 a spring for biasing said inner sleeve with respect to said outer surface in a direction in which said tapered outer surface is tapered down,

wherein said balls are made of electrical
insulating material.